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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/523,005	08/09/2005	Yoshinori Fujii	AI 373NP	4657	
23995 RABIN & Bero	7590 04/24/200 do. PC	EXAMINER			
1101 14TH ST		CASTELLANO, STEPHEN J			
SUITE 500 WASHINGTO	N, DC 20005		ART UNIT	PAPER NUMBER	
			3781	3781	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE		
3 MONTHS		04/24/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary		Application No.	Applicant(s)			
		10/523,005	FUJII, YOSHINORI			
		Examiner	Art Unit			
		Stephen J. Castellano	3781			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)	Responsive to communication(s) filed on 09 M	arch 2007.				
		action is non-final.	·			
3)	Since this application is in condition for allowar		osecution as to the merits is			
	closed in accordance with the practice under E					
Dispositi	ion of Claims					
4)⊠	Claim(s) <u>1-3</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdraw	vn from consideration				
	Claim(s) is/are allowed.					
· —	Claim(s) 1-3 is/are rejected.					
7)[Claim(s) is/are objected to.					
8)	Claim(s) are subject to restriction and/or	r election requirement.				
Applicati	on Papers					
97	The specification is objected to by the Examine	, r				
	The drawing(s) filed on is/are: a) acce		Evaminer			
,	Applicant may not request that any objection to the					
	Replacement drawing sheet(s) including the correcti					
11)	The oath or declaration is objected to by the Ex					
	ınder 35 U.S.C. § 119					
	Acknowledgment is made of a claim for foreign	priority under 35 H S C & 110/a) (d) or (f)			
_	All b) Some * c) None of:	phonty under 33 0.3.0. § 119(a	()-(d) Or (1).			
-/.	1. Certified copies of the priority documents	s have been received				
	2. Certified copies of the priority documents		ion No			
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Inform	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal F	Patent Application			
· ·	rademark Office	6) Other:	·			

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites that a peripheral edge encompassing an opening is corrugated in the lateral direction. It is believed that applicant is referring to an inner peripheral edge at the inner edge of the flange. However, there is no discussion of this inner peripheral edge being corrugated nor is the inner peripheral edge shown as being corrugated. The embodiment of Fig. 4 is believed to be claimed by Fig. 4 since claim 1 mentions both vertical corrugations and lateral corrugations and minute projections and minute recesses. However, there is no discussion of the dimensions of the corrugations. Therefore, discussion of the amplitude (d) of the waveform and the wavelength or pitch (p) of the waveform can't be related to the Fig. 4 embodiment. This is a new matter rejection.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the dimensions of the waveform as added to the embodiment of Fig. 4 having the minute projections and minute recesses as stated in claims 1-3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 1-3 are objected to because their structure is not properly shown in a drawing as the dimensions do not appear in Fig. 4.

The drawings are objected to because reference sign 11b mentioned in the drawings is never discussed in the written specification and reference sign 11a is mislabeled in Fig. 2A and 3A since the leader line points to the flange instead. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing

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figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The disclosure is objected to because of the following informalities: reference sign 11b is not mentioned in the specification and page 6, lines 10-13 are incorrect for the reason that the outer peripheral edge 11a doesn't appear to be finely corrugated when seen in horizontal direction as shown in Fig. 2C.

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 1 states "a peripheral edge" in line 3, "an outer peripheral edge" in line 5 and "an outer peripheral edge" in line 7 as though three different peripheral edges are present. The specification only mentions peripheral edge 11a. Also, claim 1 mentions a lateral direction for the corrugation for the first mentioned peripheral edge, the flange associated with the second mentioned peripheral edge has the minute projections and recesses (corrugations) and the last mentioned peripheral edge has a vertical corrugation. There are only two corrugations mentioned rather than three.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1- 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because three peripheral edges and three corrugations seem to be too many for this application.

Claim 2 is indefinite because it contradicts claim 1 by stating the range of 0.5 to 1.0 mm for waveform amplitude when claim 1 precludes waveform amplitude greater than 0.5 mm.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gentry.

The explanation of this rejection is contained in the Office action mailed November 16, 2006.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gentry.

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The explanation of this rejection is contained in the Office action mailed November 16, 2006.

Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 571-272-4535. The examiner can normally be reached on increased flexibility plan (IFP).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony D. Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stephen J. Castellano Primary Examiner Art Unit 3781